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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/582,830

06/14/2006

Hitoshi Asahi

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EXAMINER

YEE, DEBORAH

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

09/10/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/582,830	Applicant(s) ASAHI ET AL.	
	Examiner Deborah Yee	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/5/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 to 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Canadian patent 2,429,439 cited by Applicants in IDS dated September 5, 2006.

3. Canadian patent '439 in claims 1 to 17 disclose steel plate and line pipe having a composition with constituents whose wt% ranges overlap or closely approximate those recited by the claims; such similarities in wt% ranges establishes a prima facie case of obviousness because it would be obvious for one skilled in the art to select the claimed alloy wt% ranges over the broader disclosure of the prior art since the prior art teaches the same utility (line pipe having ultra-high strength and low-temperature toughness for transporting crude oil or natural gas).

4. More specifically, prior art alloy teaches less than 0.010% Nb that closely approximates Applicants' claimed lower limit of 0.01% Nb. Since Applicant has not establishes criticality of the claimed Nb range (e.g. by comparative test data), then a composition with 0.01% Nb verses a composition with slightly less Nb would depict a mere difference in the proportion of element without any attendant unexpected result which would not patentably distinguish claims over prior art.

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5. In addition when calculated, one or more prior art steel examples in Table 1 on page 36 satisfy the P value. Also prior art example L in Table 1 closely meets the claimed composition and contains 0.05% Nb. Although steel L is disclosed as a comparative example, it is still considered prior art since it is published and known.

6. Prior art on pages 29 to 31 teaches making steel and linepipe in substantially the same manner as claimed by Applicants comprising the steps of subjecting steel to rough rolling at recrystallization temperature of 900-1,100°C (overlaps claimed temperature range of 1000 to 1250°C), rolling in an unrecrystallization austenitic region at 750 to 880°C and base on example 1 on pages 33 and 34 have reductions or 91 to 95% (within claimed range of 900°C or below with reduction of not less than 75%), applying accelerated cooling from the austenitic region not lower than 1°C/sec to a temperature not higher than 550°C (suggest center plate thickness cooling rate of 1 to 10°C/sec. to a temperature of 500°C or below), forming plate by the UO process, joining pipe together with submerged arc welding, and expanding the pipe.

7. Even though prior art does not teach steel having the ratio $(Hv-avep)/(Hv-M) = 0.8$ to 0.9, the yield ratio in the direction of rolling $(YS-Lp)/TS-Lp$ not greater than 0.8 , circumferential tensile strength TS-C between 900 and 1100 MPa, and the tensile strength in the longitudinal direction of line pipe not greater than 0.95 times the tensile strength in the circumferential direction as recited by one or more claims, such properties would be expected since composition and process of making are closely met and in absence of proof to the contrary.

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8. Similar to present invention, Canadian patent in table 6 on page 43 teaches V-notch Charpy value at -30°C not lower than 200 Joules.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah Yee whose telephone number is 571-272-1253. The examiner can normally be reached on monday-friday 6:00 am-2:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Deborah Yee/
Primary Examiner
Art Unit 1793

/DY/